# **EFNA Steering Committee**

## **Meeting Summary**



### **Lacy Road**

### Fitchburg Community Center to S. Syene Road

### City of Fitchburg

Thursday, January 14, 3:00 PM – 5:00 PM Fitchburg Community Center – Syene Room

- 1. Next meeting and meeting summary
  - a. It was agreed that the next Steering Committee meeting would follow the normal monthly schedule and will be held on February 18.
  - b. The format of the meeting minutes was discussed. It was agreed that the meeting documentation should be in the form of a meeting summary vs. meeting minutes to reflect the discussion format of the meetings. If attendees have comments on the meeting summary an email should be sent to Ahna with the suggested changes.

### 2. Shared use path

- a. Troy Pankratz, Mead & Hunt, reviewed the desirable path width for running length along Lacy Road to be 10'. Items discussed at the December 17<sup>th</sup> meeting were restated. Patrick Cheney stated that he contacted a local asphalt paving contractor and learned that the smallest paving equipment they have is a 10' machine.
- b. Members of EFNA strongly encouraged the City to consider an 8' path for the length of the project, with the exception of the existing 10' wide stretches of path. The question was raised as to why the off-road path needs to be 10' wide, given the premium on-road bike lane facilities.

### 3. Minimum terrace width discussion

- a. Troy reviewed the desirable terrace width for running length along Lacy Road to be a minimum of 7.0'. Items discussed at the December 17 meeting were restated.
- b. Ahna commented that one factor that has not been identified for the terrace area is storm water treatment. Bioswales are being considered along the project to handle the storm water requirements of reducing the total suspended solids (TSS) and peak flow control. The terrace width may also be dictated by these storm water treatment needs. More evaluation needs to be completed for the storm water component of the project.

### 4. Tree impacts

a. Troy and Ahna discussed the next steps for identifying trees which will be impacted by the project. Troy presented updated exhibits showing all of the trees on the project. Trees which are close to the slope intercepts will be evaluated to determine if the project impacts can be reduced by adjusting the alignment, terrace width, or path width. b. Ahna explained the Critical Root Zone and the controlling factors involved with determining if a tree can be saved. Additional evaluation needs to be done to confirm whether trees can be saved with a narrower path or narrower terrace.

### 5. Intersection improvements

- a. Troy provided exhibits showing a redesigned Fahey Glen roundabout intersection. The Lacy Road alignment has been shifted north along the Cooke property and the roundabout has been shifted to the west. The overall right-of-way acquisition needs at the intersection has been reduced. The committee was generally in favor of the new design.
- b. Ahna presented a memo which describes the proposed turn lanes at the minor intersections. Ahna stated that the median pavement that was previously shown between some of the left turn lanes will be removed. Ahna provided a discussion on the growth of traffic volume on Lacy Road over the past decade and stated that volumes are expected to continue to increase until the Nobel Drive extension is completed. The Nobel Drive extension is anticipated to detract some through traffic from Lacy Road.
- c. Ahna provided general comments about the turn lanes; noting that warrants for right turn lanes were not met at any of the intersections, but warrants for left turn lanes were met at all locations.
- d. Ahna compared the existing turning volumes with the projected volumes and determined that there are a few intersections where the turning volume is not close (at this time) to meeting warrants for the additional lane. In those cases, the recommendation is to build the outside curb and gutter at the ultimate location to accommodate a future left turn lane, but not construct the turn lane at this time. The turn lane area would be constructed with an island to restrict cars from using the turn lane area, continue to calm traffic, and allow for a future turn lane when volumes are warranted to build it.
- e. Ahna mentioned that the 2' buffer space could be eliminated at/near the intersections to reduce the footprint of the intersection. This decision is yet to be determined.

### 6. Road alignment update

- a. Troy and Ahna described the roadway alignment between Notre Dame Drive and S. Syene Road. Ahna pointed out that the alignment is already shifted to the north in this location to minimize impacts at Swan Creek. Right-of-way will need to be purchased along the north side of the roadway around Sunflower Drive.
- b. Pat McGaw requested staff to take a closer look at the Swan Creek plat to confirm the right-of-way limits, or easements, on the north side of the road.
- Construction staging Troy stated that the construction staging planning is beginning.
  There will be a focus on minimizing the inconvenience for residents along the corridor.
  Specific plans have not been developed yet.



# LACY ROAD RECONSTRUCTION EFNA STEERING COMMITTEE MEETING

DATE:	TIME:	LOCATION:	PURPOSE:	The second secon	
January 14, 2016	3:00 p.m.	Fitchburg Community Center, Prairie View Room, City of Fitchburg			

# ATTENDANCE RECORD

NAME (Please Print)	ADDRESS	CITY/STATE/ZIP CODE	PHONE NUMBER	Email (Please fill out if you would like to receive notifications by email)
Troy Pankrutz	2440 Deming way, Middleton WI		608-443-0442	tvay. pankrot2@ mead huntecom
Ahna Bizjak	aty of Fitchburg		608-270-4262	ahnaray. bizjako fitchburgwi.gov
PATRICK CHENEY	5211 KMTYPREST PR	FITCHBURBWI 53711	2716494	CHENEYPE @JUNO. rOM
PAT MEGAW	2570 CURLY OAKS LANG	FITCH BURG WI 53711	271-4642	KMcgawemsn.com
Mike Helmes	549/ hog Rd	Filder 11 53911	278-4005	holmopatt. net
Sam Cooke	5335 Lacy Rd	Fitchtung WI 53711	273-2694	samuelcooke @ sbeglobal.aet
PAULA BROWN	5491 E. LACY Rd	53711	278-4008	HOBROGATT. NET
Bill CAMPERLINO	2689 Mc GAN RD	//	469-3775	BCAMPERLING (2) AMERITECH. NET
Steve RACCHINI	5402 LACYRD		276-8186	5 N RACCHINI & G Mail, Com
Dovid D. Willborn	5480 Lacy Rd	Fitoskus Wi. 5371,	608-274-4570	d. willborn att. net
Daniel Carpenter	Alder		-	
Steve Arnold	mayor			
Copy Hopman	<i>f</i>			



### Memo

5520 Lacy Road Fitchburg, WI 53711 (608) 270-4260 Fax: (608) 270-4275

То:	East Fitchburg Neighborhood Association		
From:	Cory Horton, P.E., Director of Public Works/City Engineer		
Date:	January 7, 2016		
Subject:	Lacy Road Design Update		

Staff has prepared the following memo in response to the design requests that have been expressed by the EFNA Lacy Road representatives in their January 2 memo.

### **Shared Use Path**

The City standard for a shared-use path is a 10' wide asphalt path with a minimum 2' shoulder at 4.0% (see Standard Detail Drawing 4.02). The City has adopted this as their standard path width for several reasons:

- 1. It is the standard width for a 2-way, multi-use path that meets all of the design guidance for shared-use paths including AASHTO design standards, the Wisconsin Bicycle Facility Design Handbook, and WisDOT path standards.
- 2. The 10' width accommodates two-way travel by providing 5' in either direction. It also allows adequate room for faster-moving bicyclists to safely pass pedestrians.
- 3. The 10' width is desirable for maintenance purposes, allowing our snow clearing operations to minimize ripping or damaging the grass areas on either side of the path.
- 4. Constructability becomes an issue with asphalt paths that are less than 10'. The availability of 8' pavers is becoming obsolete. Because the 10' path is the standard width among the industry, contractors are no longer maintaining equipment to pave at the 8' width. This may result in hand-work for the paving operations which is significantly more costly and does not produce the same quality for the pavement surface.

Although the City standard is 10', there are places where an 8' path width can, and should be considered. The WisDOT Facilities Development Manual (FDM) also allows for flexibility to reduce the path width where it is justified. For this project, staff is recommending the following approach to determine locations where an 8' path should be considered:

- It should be noted that we want to minimize the narrowing/widening of the path along the project, so the 8' width should be considered based on a benefit for a continuous stretch of path that:
  - a. Avoids right-of-way acquisition
  - b. Improves topography/profile challenges with driveways
  - c. Avoids impacts to healthy trees in good condition, tolerant of disturbance caused by nearby construction
  - d. Avoids environmental impacts (wetlands, Swan Creek, etc)

Mead & Hunt is in the process of identifying locations that may benefit from an 8' path width. The hope is to present this information at the January 14 meeting.

### <u>Terrace Width – See attached Typical Section exhibit</u>

Staff is aware that the resolution did not specify a terrace width in the typical section. This was done with intention. Staff was concerned that if a terrace width was established in the resolution, it would eliminate the flexibility to modify the terrace width as needed to avoid impacts or in locations where a wider terrace would fit within the existing right-of-way.

During the October and November meetings, it became clear that there was a lack of understanding on the need and function of a terrace between the shared-use path and the roadway. In recognition of this, a majority of the December meeting was focused on discussing the terrace width and educating residents on the multiple reasons for a terrace.

It should be mentioned that the preferred terrace width for Public Works is 10'. This is the optimal width to allow for snow storage, street tree growth, and space for underground utilities. However, knowing the concerns from the EFNA group to maintain a narrow footprint for Lacy Road, Public Works staff has recommended a 7' terrace for the running length of the path. The 7' dimension was developed by reviewing the minimum width that could still maintain the functionality of the terrace. A 7' terrace maintains the required clearances for both the path and road (2' minimum to the edge of a sign/street light) and provides a 4-ft "utility zone" for trees, signs, and street lights. The terrace provides a green buffer between the road and the shared-use path, but most importantly provides a space for the following components of the roadway:

- i. Snow storage
- ii. Street signs
- iii. Street lights
- iv. Underground Utilities and Maintenance
- v. Driveway Aprons
- vi. Fire Hydrants
- vii. Placement of refuse and recycling bins
- viii. Street trees

There are locations where the terrace can, and should, be narrowed. In these isolated locations, the terrace width can be reduced to as narrow as 3' which would maintain the 2' clear zone for the path and lateral clearance for the roadway. A narrow terrace width could be used for limited lengths along the road to avoid impacts to trees, avoid right-of-way acquisition, or at pinch points where we need to narrow the entire road cross-section (Swan Creek culvert/bridge for example).

For all of the reasons stated above, it is not acceptable to construct Lacy Road with a 3' terrace between the path and the road for a continuous length along the roadway. It is necessary to maintain a 7' standard terrace with the flexibility of narrowing the terrace at isolated locations.

### **Intersection Improvements**

It should be pointed out that no decisions have been made about the turn lanes at any of the intersections. Mead & Hunt has completed a turn lane warrant analysis for each intersection and has prepared draft plans to identify the locations where turn lanes meet FDM warrants (based on future turning movement volumes and the volumes on Lacy Road). This is still very preliminary and the drawings are meant to show how the turn lanes would fit (or not fit) along the corridor. Staff appreciates the input from the EFNA Lacy Road group as another factor to consider when evaluating the turn lanes at intersections.

Staff received 30% plans on December 22 and will be reviewing the turn lane warrant analysis to prepare a recommendation for each intersection. Staff concurs that some of the turn lanes may not be necessary and will be preparing a recommendation for each intersection based on the warrant analysis, acceptable delay on Lacy Road, and impact on travel speeds. This recommendation will be presented to EFNA at the January 14 meeting.

### Roundabout at Fahev Glen

Preliminary drawings of the roundabout were provided at the December meeting. Based on input received from Sam Cooke, Mead & Hunt is preparing an alternate roundabout/road alignment option to consider at this location. The revised layout will be presented at the January 14 meeting.

### **Trees**

It is the goal of staff to minimize the number of trees that are impacted by this project. As noted above, additional analysis is being done to determine where trees can be avoided by narrowing of the path or terrace. This is still under review, and will hopefully be included for discussion at the January 14 meeting.

### **Burying Overhead Power Lines**

Staff appreciates the input from the EFNA Lacy Road group and will continue to work with MG&E on the potential to bury the overhead power lines. It will likely come down to a cost factor and we are not at a point to know whether there is sufficient funding to cover the cost. It will be a policy decision if the cost to bury exceeds the amount that has been budgeted.

### Road Alignment between McGaw Park Entrance and Syene Rd

The road alignment in this area has already been shifted as far to the north as it can go within existing right-of-way. In fact, the project requires right-of-way acquisition on the north side from the Ganshert property and the property east of Sunflower Drive. The controlling factor is the Swan Creek culvert and McGaw Park. Between Sunflower Drive and McGaw Road, a stormwater bioswale is being considered on the north side of the road, much of which will also require right-of-way acquisition on the north side. The road alignment in this area will likely be controlled by the stormwater needs of the project. Staff appreciates the input from the EFNA Lacy Road group to minimize the impact to the residential properties on the south side and will take that into account as the design proceeds. However, the flexibility for that shift will rely largely on the stormwater treatment requirements.

### **Moving Forward**

Preliminary information is being shared with the EFNA group as soon as it is available. Often times, this means that EFNA is seeing the plans and information at about the same time as City staff. All of these preliminary drawings should be reviewed from the perspective that they are NOT illustrating the final, or even staff recommended, design in all cases. They are being provided as a starting point for discussion. City staff is interested in the feedback from the EFNA group during this preliminary stage.

However, several other factors need to be considered as decisions are made for the project beyond the typical section. This includes the operations of the roadway (travel speed, turn lanes, capacity, geometry), stormwater treatment, maintenance operations, safety, sight distance, and aesthetics. All of these factors must be taken into account to ensure this long-term, financial investment is effective and offers the best balance amongst the goals of the project. Each iteration of the plans will bring the design closer to its final form. The goal of the EFNA meetings was to get input from the group on the preliminary plans and allow that input to be one of the many factors that is considered during the design process. There may be cases where the staff recommendation does not match the recommendation of the EFNA Lacy Road group. That situation is not uncommon on projects like Lacy Road. However, staff is trying to be responsive and as flexible as possible to listen to, and incorporate, the input from the EFNA Lacy Road group into the final design.

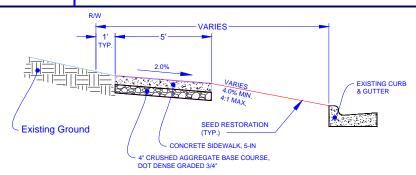
# DETECTABLE WARNING FIELD (TYP.) 2.0' 1.5' TYPE 2 RAMP PLAN VIEW

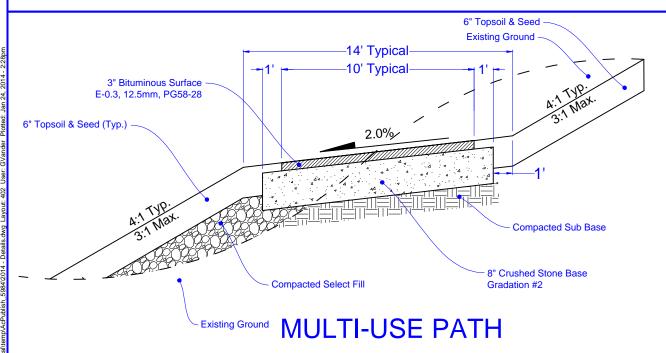
### GENERAL NOTES FOR ALL SIDEWALK RAMPS

- Install curb cuts at sidewalk ramps with either full removal and replacement or by "sawcutting" the curb head.
- Curb tapers at curb cuts shall be 18" unless otherwise directed by the Engineer.
   The width of the flat bottom of the ramp at the curb shall be 60" minimum.
- 4. The maximum slope of the ramp between the back of the curb and the front of the detectable warning field shall not exceed 2%. The maximum slope of the ramp between the front of the detectable warning field and the sidewalk shall not exceed one inch per foot.
- 5. All handicap ramps shall include detectable warning fields with truncated domes.
- 6. Detectable warning field shall be oriented in a manner that it is parallel to the direction of pedestrian traffic. When curb is perpendicular to direction of pedestrian traffic, install detectable warning field tight to back of curb. When curb is not perpendicular to the direction of pedestrian traffic, stager detectable warning field panels to minimize space between detectable warning field panels and back of curb.
- 7. For a sidewalk ramp, detectable warnings shall be a minimum of 4' x 2'. For a bike path ramp, detectable warnings shall be a minimum of 8' x 2'.
- When conditions require more information, refer to "UFAS" (Uniform Federal Accessability Standards).

### GENERAL NOTES FOR ALL SIDEWALK

- Sidewalk thickness shall be 7-inches through driveways, 6-inches at ramps, and 5-inches for all public sidewalk.
- 2. Sidewalk cross-slope shall not exceed 2.0%.
- 3. Provide a 1/2" expansion joint at all ramp locations, through driveways, against the curb and gutter, and every 200' of the sidewalk.
- 4. Construction forms shall be equal to or greater than the sidewalk thickness.





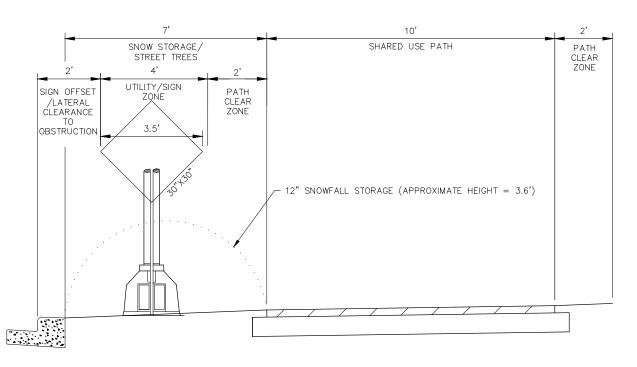


SIDEWALK & PATHS
STANDARD DETAIL DRAWING

DATE: 1/24/2014

SHEET NO.:

4.02



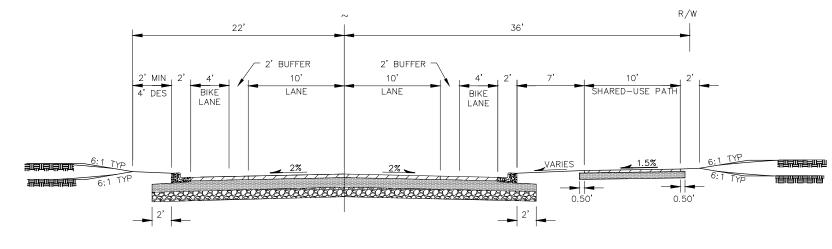
10' PATH LATERAL CLEARANCE TO OBSTRUCTION SHARED USE PATH PATH CLEAR ZONE

DESIRABLE TERRACE FOR RUNNING LENGTH

MINIMUM TERRACE AT ISOLATED LOCATIONS

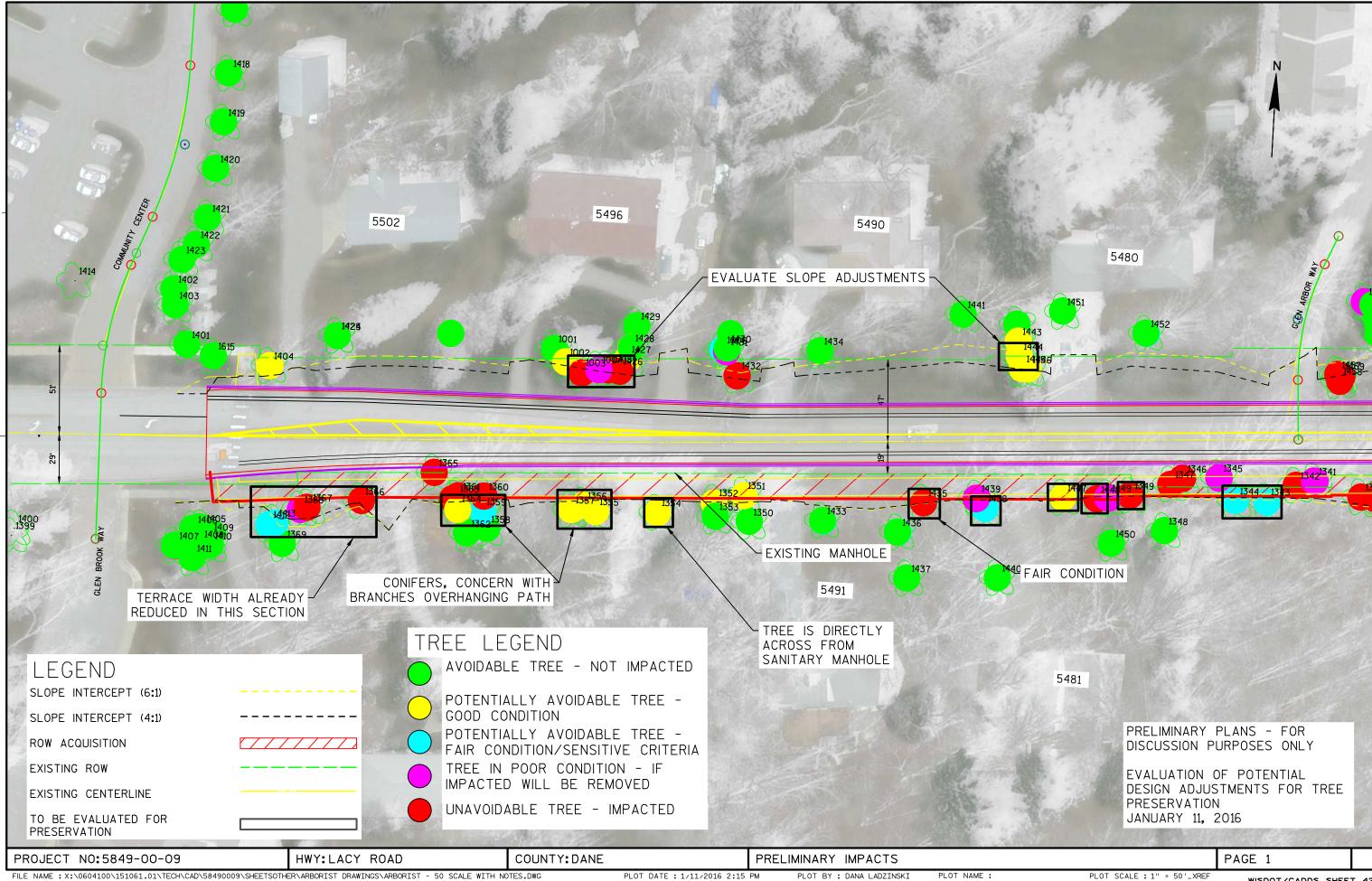
### TERRACE FUNCTIONS

- SNOW STORAGE
- STREET SIGNS
- STREET LIGHTS
- STREET TREES
- MAINTENANCE OF UTILITIES
- DRIVEWAY APRONS
- FIRE HYDRANTS
- RUFUSE AND RECYCLING BINS



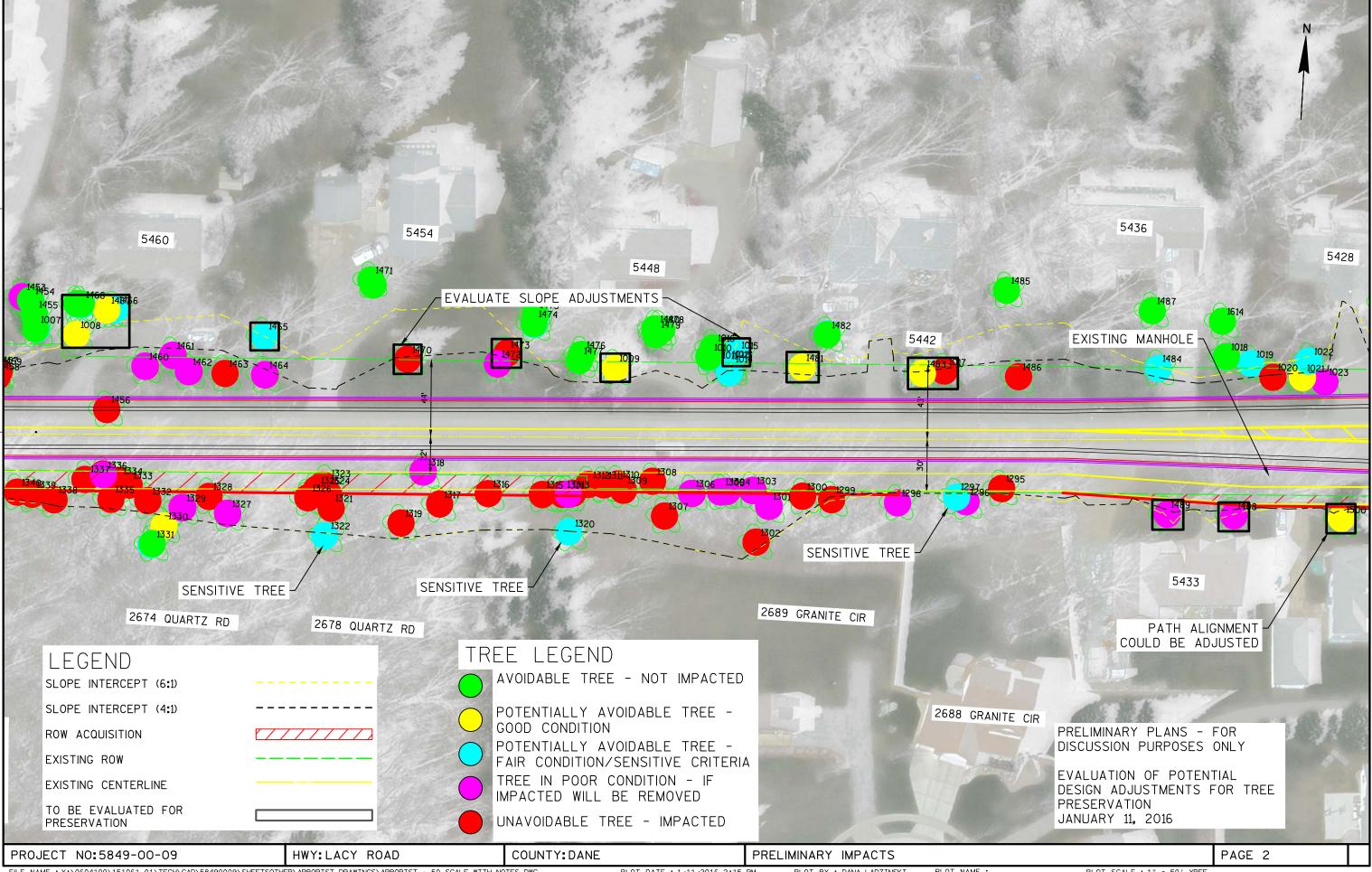
FINISHED TYPICAL SECTION LACY ROAD

PROJECT NO:5849-00-09 HWY:LACY ROAD COUNTY: DANE TYPICAL SECTIONS SHEET E



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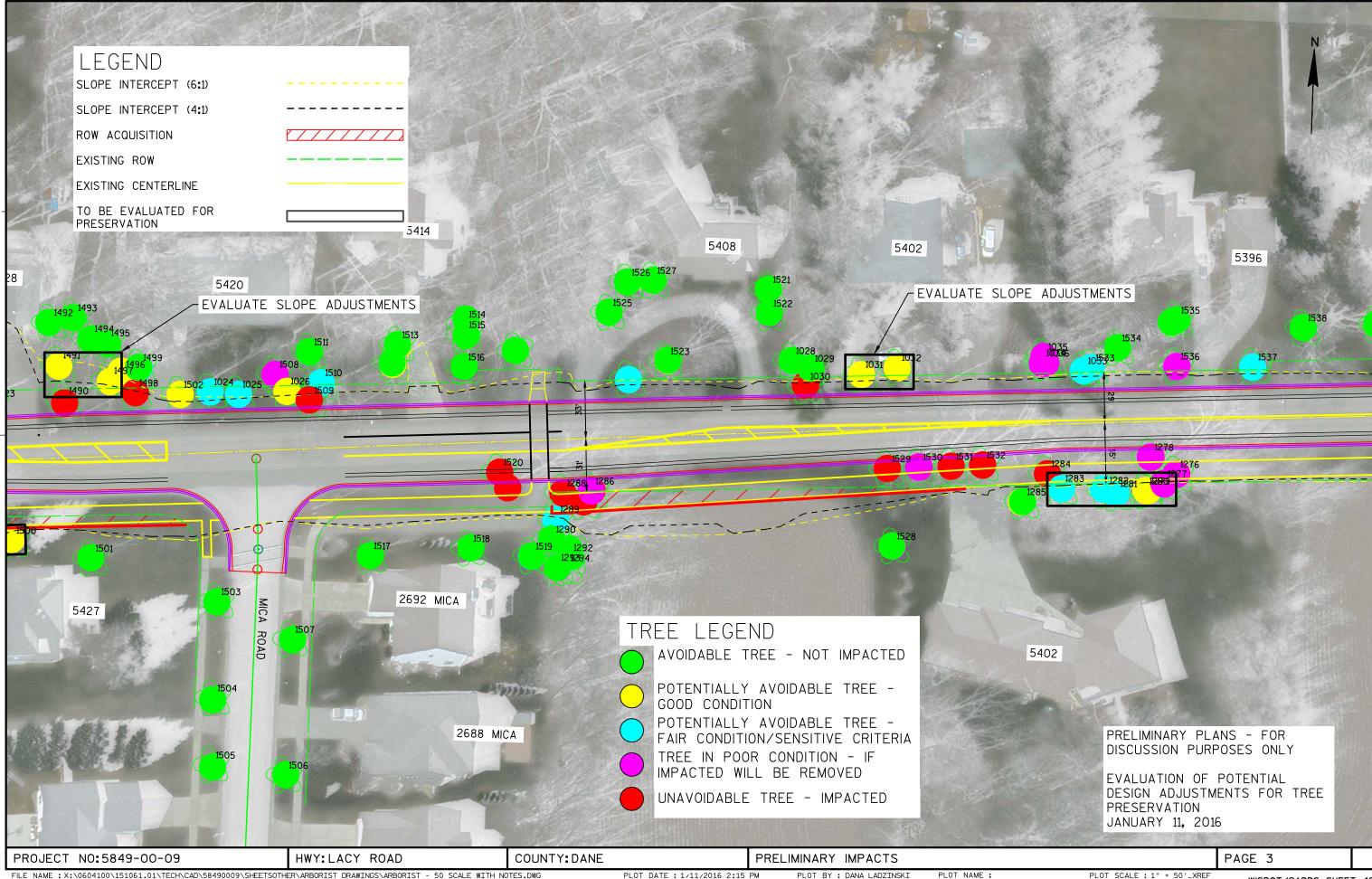


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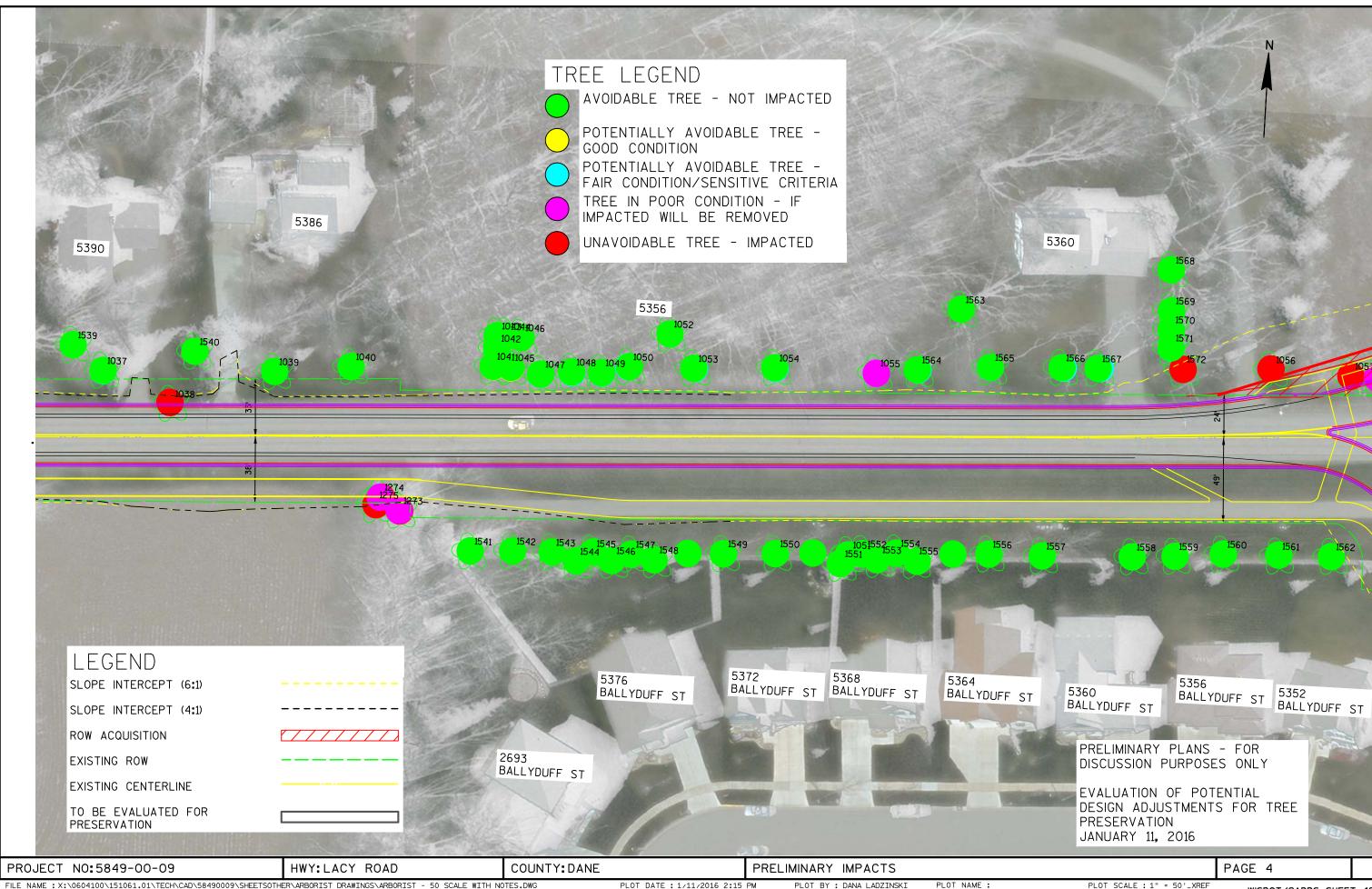
PLOT BY : DANA LADZINSKI

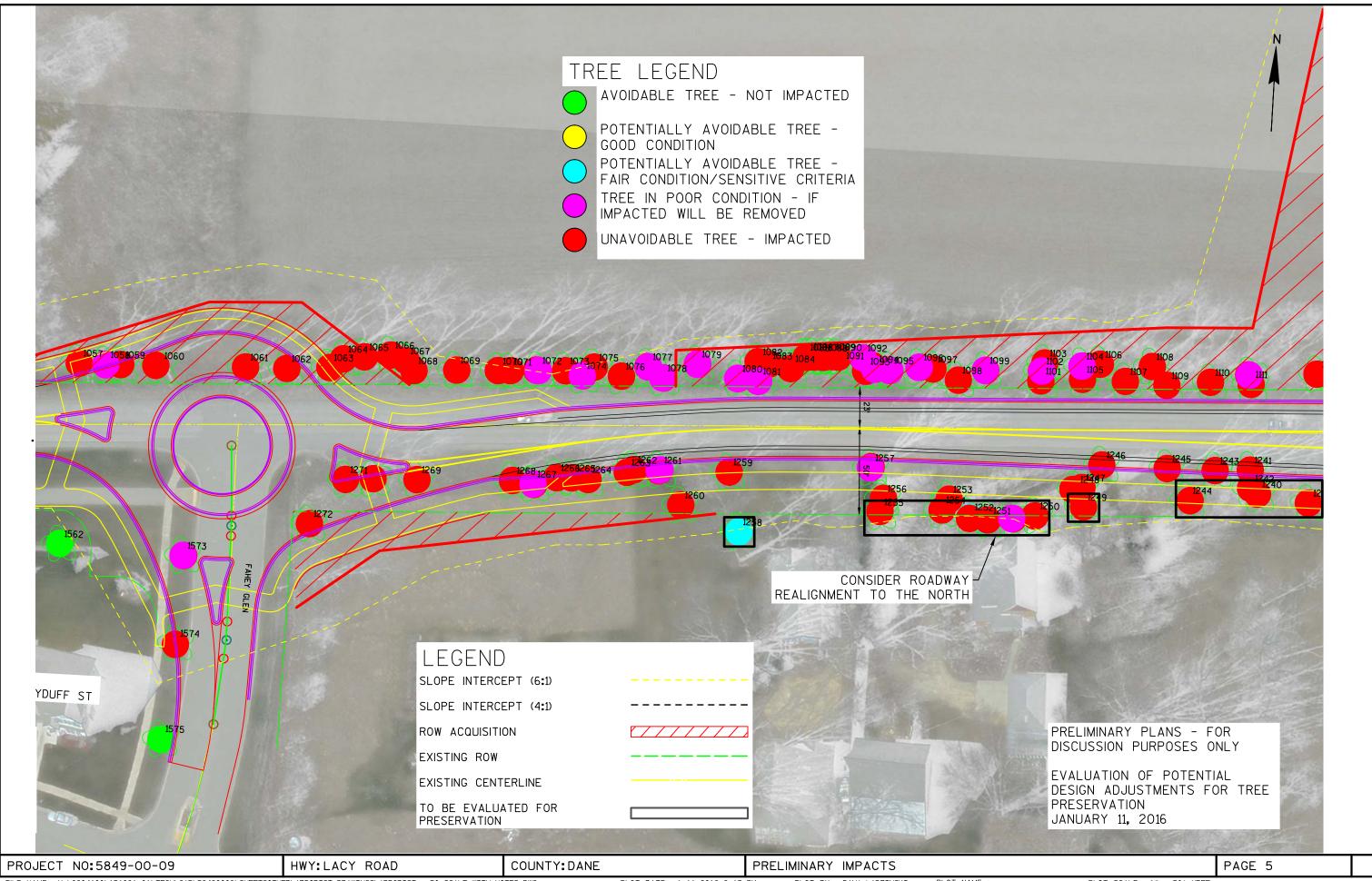
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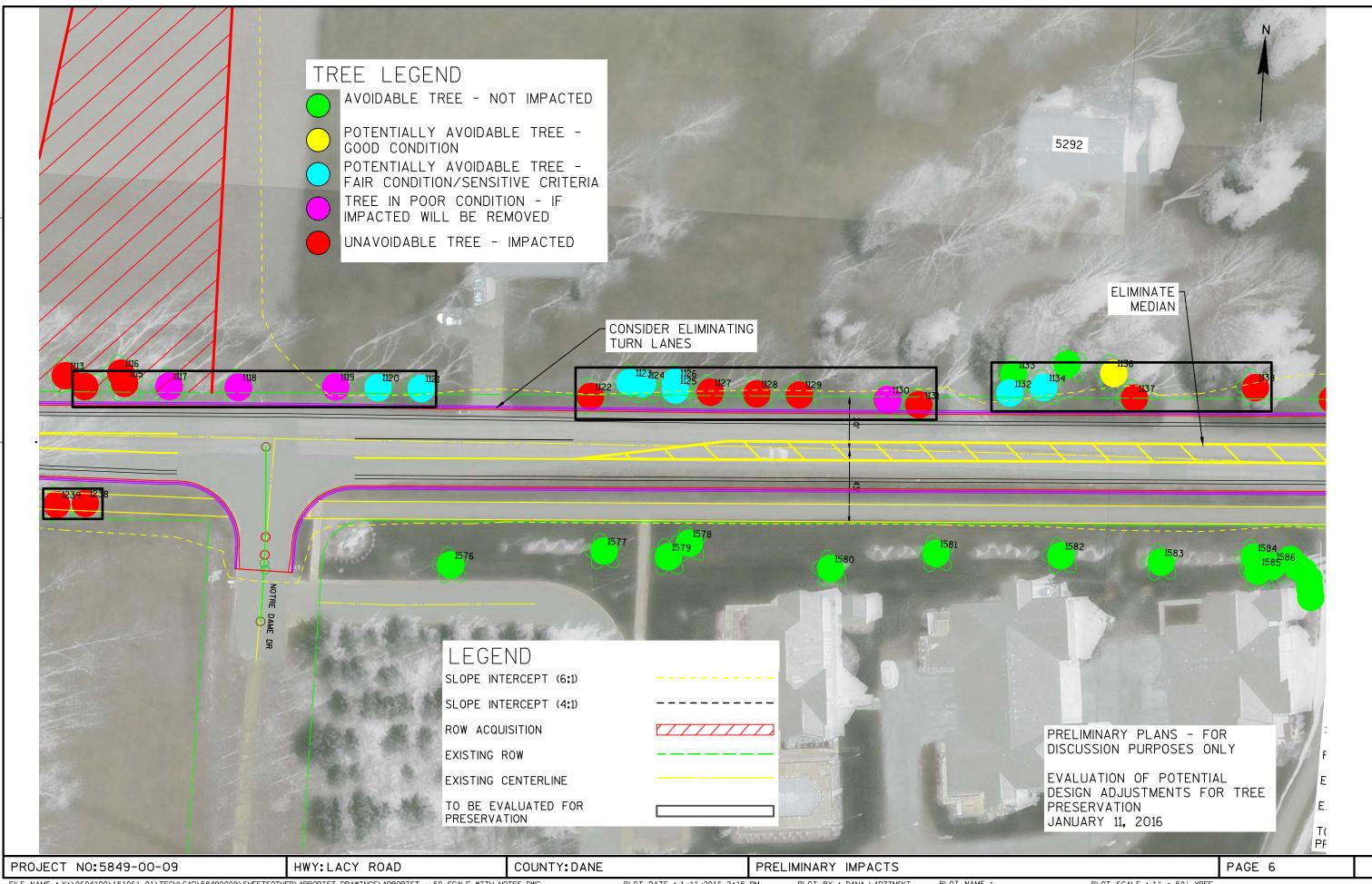


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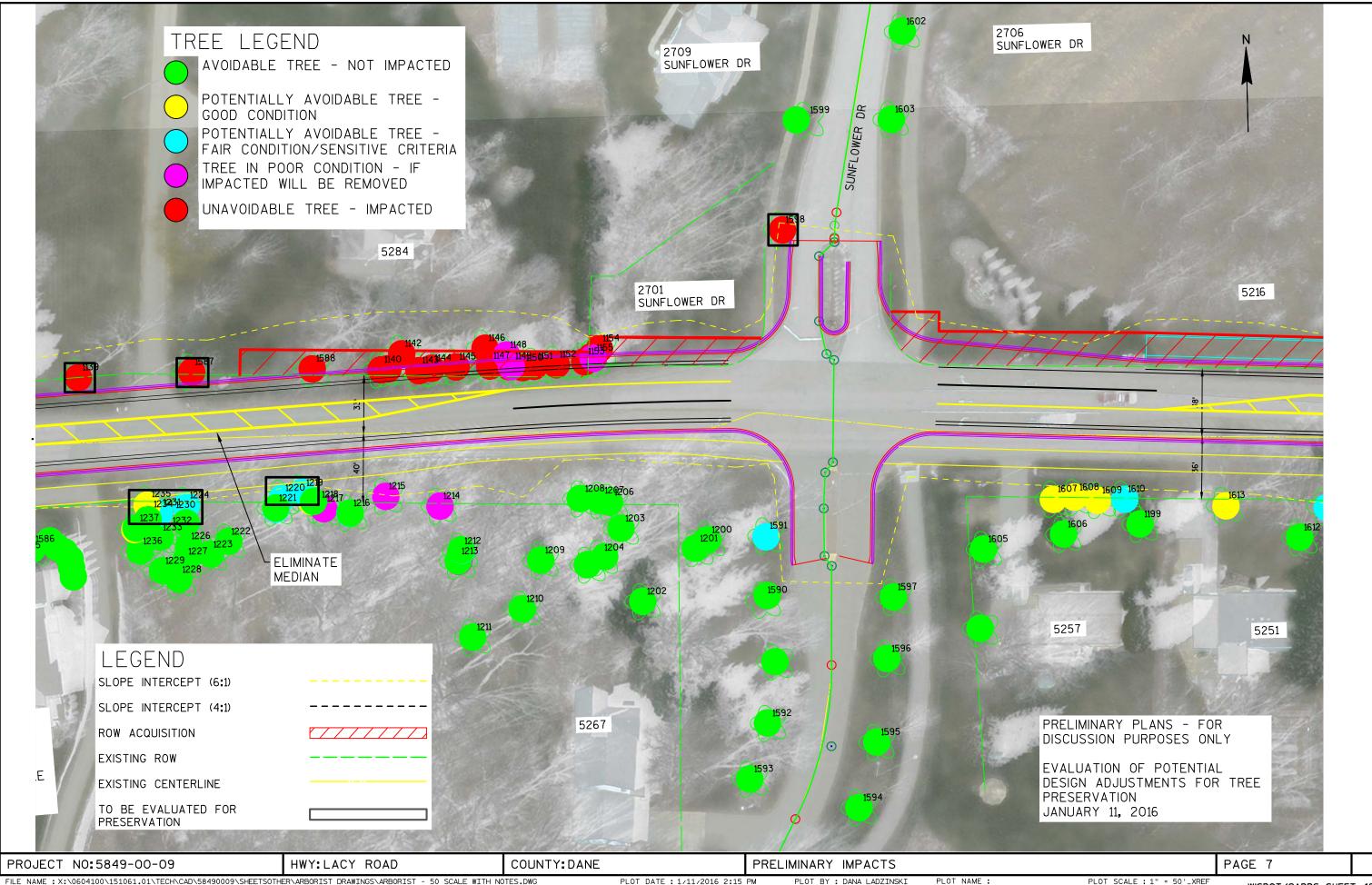


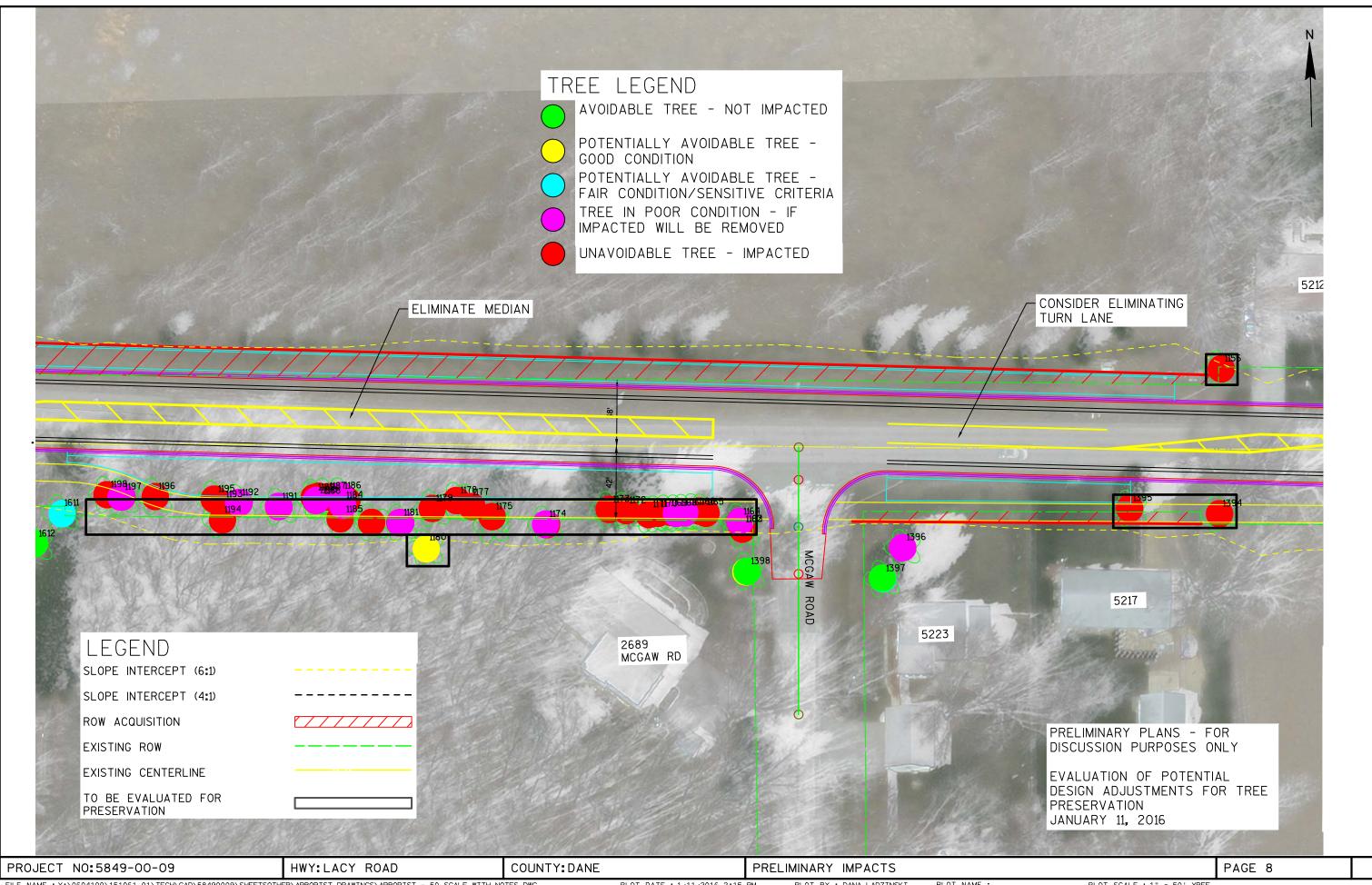
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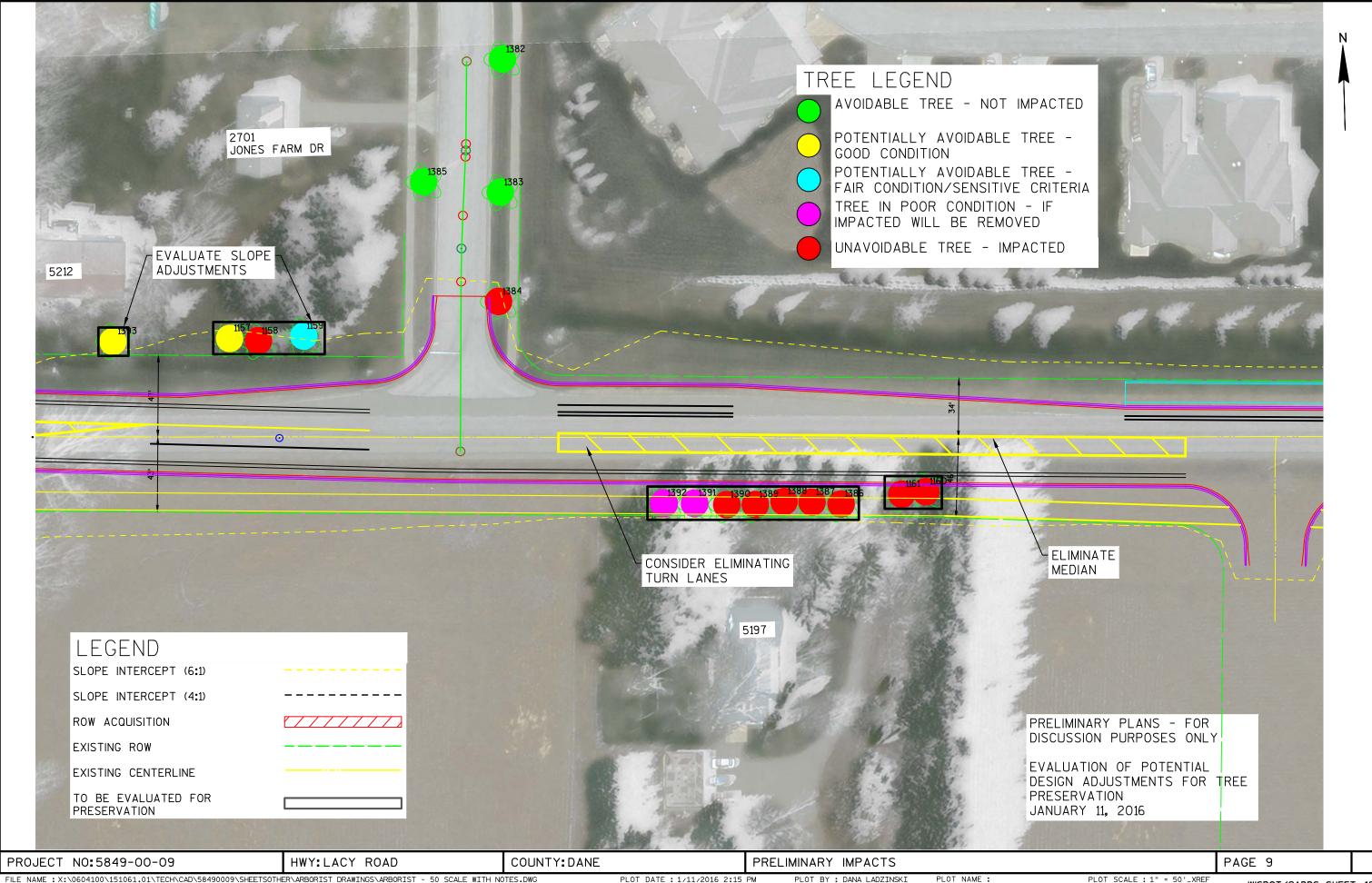


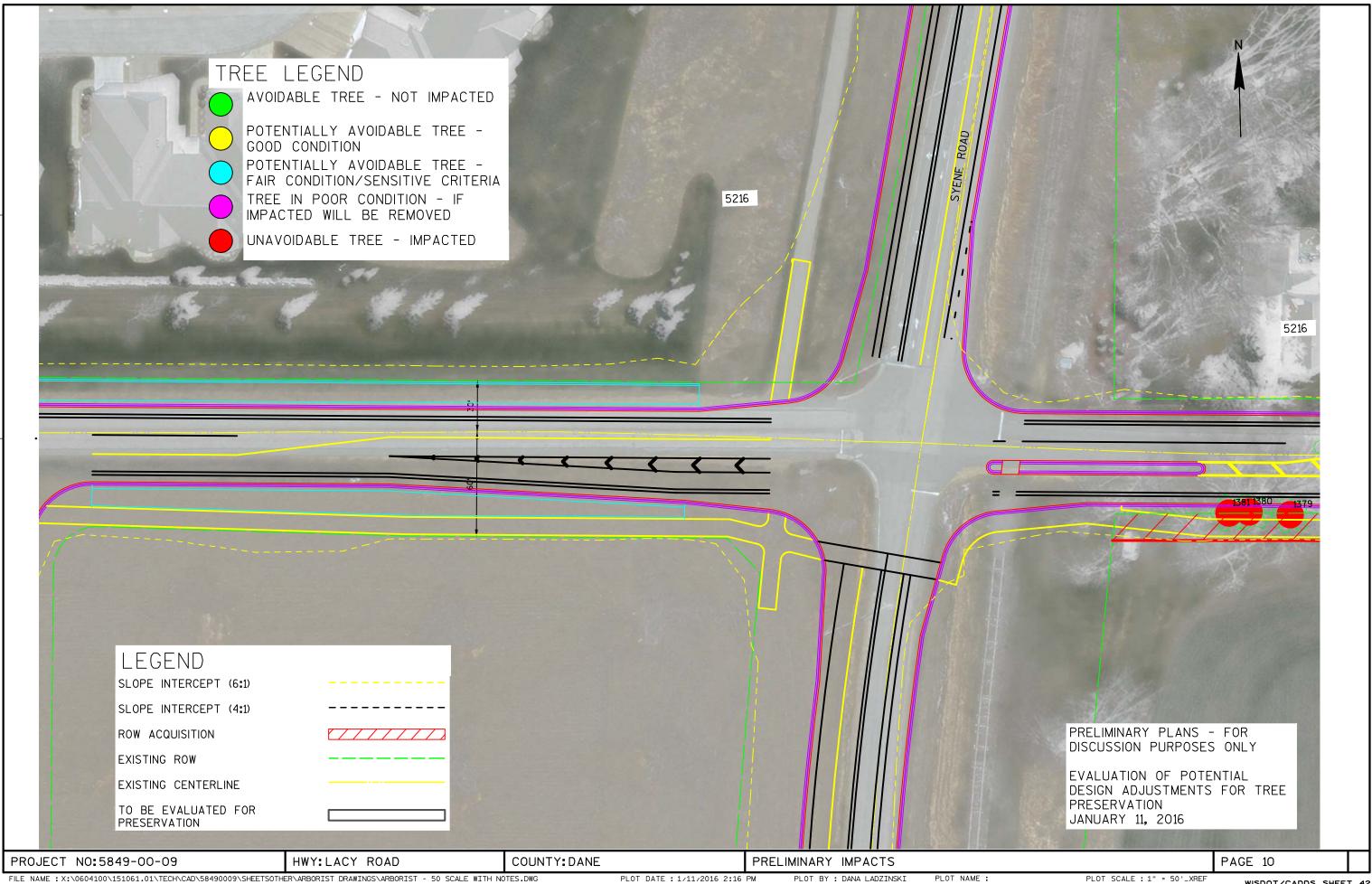
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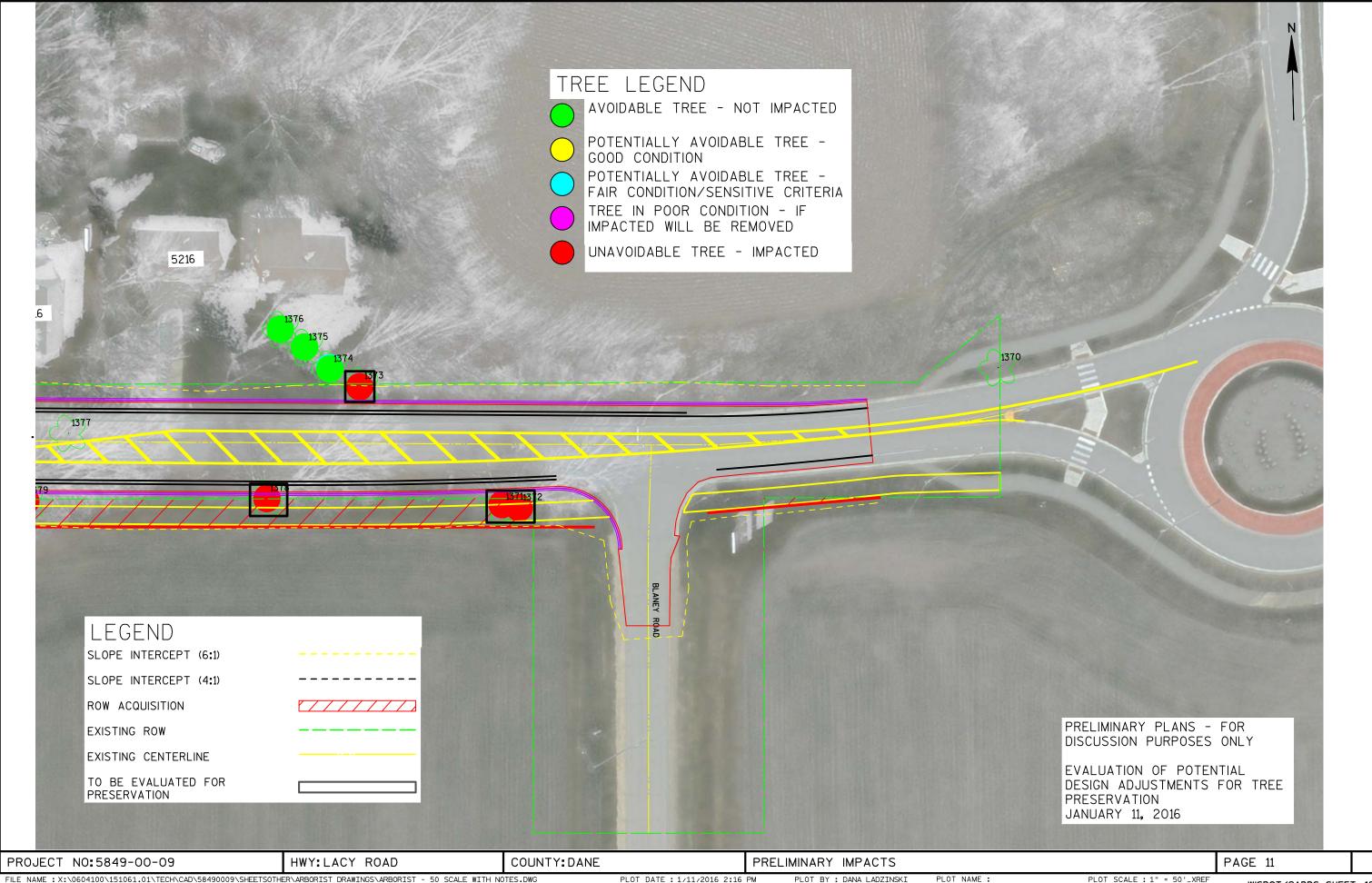
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### Memo

5520 Lacy Road Fitchburg, WI 53711 (608) 270-4260 Fax: (608) 270-4275

To:	Fitchburg Common Council and Mayor		
From:	Ahna Bizjak, P.E. – Transportation Project Engineer		
Date:	January 12, 2016		
Subject:	Lacy Road Reconstruction – Turn Lane Recommendations		

One of the goals for the Lacy Road project is to consider intersection improvements (traffic control, turn lanes, etc.) at each intersection from City Hall east to S. Syene Road. There are a total of 7 intersections within the length of the project:

- Mica Road
- Fahey Glen
- Sunflower Drive/McGaw Park Entrance
- McGaw Road
- Jones Farm Road
- North Park Street
- S. Syene Road

A full intersection control evaluation (ICE) was conducted for the Fahey Glen and S. Syene Road intersections to determine if a change to the traffic control should be considered with the reconstruction. A detailed analysis was conducted at each intersection resulting in a recommendation for a roundabout at Fahey Glen and a traffic signal at S. Syene Road.

The other 5 intersections will remain with the same form of traffic control (two-way stop-control), but have been evaluated to consider whether any turn lanes meet warrants based on projected traffic volumes and operations along Lacy Road. Mead & Hunt has completed a warrant analysis at each intersection and notes the following trends:

- Right turn lanes were not warranted at any location
- Left turn lanes met warrants at each intersection
  - Future turning movement projections were not available for the McGaw Road or Sunflower Drive/McGaw Park Entrance, so the warrant analysis for turn lanes at these intersections was based on the through traffic projections on Lacy Road. The through traffic volumes are high enough to warrant a left turn lane, even with a minor left turn volume assumed.

City staff has reviewed the Intersection Control Evaluation Reports, turn lane warrant analysis, 30% plans, and input provided by EFNA through meetings and documented in the January 2 EFNA memo. Based on those factors, staff offers the following approach and recommendation for each intersection.

- Turn lanes are meant to improve safety, reduce delay, and improve vehicular operations at intersections. However, the trade-off to adding turn lanes is a wider footprint and the potential of allowing higher vehicular speeds by minimizing conflicts and delay for through traffic. Because one of the goals for this project is to improve compliance with the posted speed limit and minimize impacts and right-of-way acquisition, these factors should also be taken into account with the final recommendation.
- The analysis was based on future peak hour traffic volumes, projected out to year 2035.
  This assumes full build-out of the McGaw Park Neighborhood, Fitchburg Center lands,
  and Uptown. From that perspective, it may not be necessary to construct the turn lanes
  now, but to plan for a future turn lane when volumes reach a point where the turn lane is
  warranted.
- Because right turn lanes did not meet warrants at any of the intersections using the
  projected future volumes, staff would recommend against right turn lanes at all
  intersections with the exception of S. Syene Road. Right turn tapers could be considered
  at some intersections, where existing right-of-way is available to accommodate. This
  would provide some value to minimize delay and inconvenience to Lacy Road drivers,
  but maintain the spirit of reducing the footprint and speed control.

<u>Mica Road</u> – The existing geometry includes an eastbound right turn lane on Lacy Road to facilitate a right turn onto Mica Road. There are no other turn lanes.

Warrants are met for a WB to SB left turn lane on Lacy Road for projected traffic. Today's traffic volumes are close to meeting warrants (347 veh/hr compared to the 458 veh/hr projected in 2035). With the recent extension of Mica Road to Nobel Drive and the development that is anticipated with the Nobel Drive extension, **staff recommends the addition of a WB left turn lane on Lacy Road at Mica Road as part of the project.** 

This recommendation is not consistent with the layout that was requested in the January 2 EFNA memo. However, staff notes that the intersection will fit within the existing right-of-way with the recommended left turn lane and the elimination of the eastbound right turn lane. Consideration could be given to eliminating the 2' buffer through the intersection to reduce the footprint where the turn lane is present.

<u>Fahey Glen</u> – The Intersection Control Evaluation (ICE) Report for Fahey Glen compared the existing stop-control intersection with a roundabout. A roundabout was being considered at this intersection for 2 reasons; future traffic projections and traffic calming benefits. Based on the analysis, a roundabout is the recommended intersection alternative based on the following benefits:

- The roundabout alternative offers lower delay for all movements when compared to the one-way stop control alternative.
- The roundabout alternative will reduce vehicles speeds on Lacy Road.
- The roundabout alternative has the potential to reduce right angle crashes and reduce the severity of other types of crashes.
- Pedestrian and bicycle user safety is enhanced as users only need to look in one direction for on-coming traffic, in addition to the benefits offered by lower vehicle speeds.

Staff's recommendation is to proceed with the single-lane roundabout alternative for the Fahey Glen intersection and recommends authorizing Mead & Hunt to proceed with final design of the roundabout.

The roundabout proposal was discussed at the Dec. 17 EFNA meeting. The group was generally supportive of the roundabout alternative, with the caveat that an alternate

layout/alignment be considered to address the comments and concerns received from Samuel Cooke, an adjacent property owner and member of the EFNA group. Mead & Hunt has prepared an alternate design in response to that request. Staff is supportive of the alternate layout/alignment and will present this at the January 14 EFNA meeting.

<u>Notre Dame Drive</u> – The existing geometry includes an eastbound right turn taper to accommodate right turns onto Notre Dame Drive.

Warrants are met for both a WB and (future) EB left turn lane at Notre Dame Drive based on projected traffic volumes. However, today's volumes do not meet turn lane warrants given the lack of connectivity of Notre Dame Drive at the present time. It is staff's recommendation to build this intersection without the turn lanes, but in a manner that would allow for future construction of a turn lane, when volumes warrant the additional lane. Staff recommends building the outside curb and gutter at its ultimate location to accommodate left turn lanes, but not provide the left turn lane at this time. The turn lane area could be constructed with pavement markings and a concrete island to provide traffic calming effects and keep drivers in the travel lane when making their left turn. This approach avoids over-building capacity on Lacy Road and supports traffic calming, but allows for that future improvement without requiring the complete reconstruction of the intersection. When a left turn lane is warranted, the island would be removed and the area paved to create the left turn lane.

This recommendation is not entirely consistent with the layout that was requested in the January 2 EFNA memo. However, it does address the concerns related to the impact of turn lanes on speed control. With this staged approach, the left turn lane would only be constructed at a point in time when it is warranted.

<u>Sunflower Drive/McGaw Park Entrance</u> – The existing geometry includes an EB left turn lane and WB right turn lane on Lacy Road. A pedestrian island was constructed in 2014, which eliminated an existing WB left turn lane to McGaw Park. The pedestrian island was added to improve the Lacy Road crossing for bicyclists and pedestrians to reach McGaw Park and the shared use path that was recently constructed on the east side of the park driveway.

Turning movement projections for Sunflower Drive/McGaw Park Entrance were not prepared as part of the McGaw Park Neighborhood TIA. However, existing counts show there are ~ 10% left turns off of Lacy Road during the peak PM hour in both directions. The opposing volume on Lacy Road will be 565 veh/hr for the WB left turn and 605 veh/hr for the EB left turn. Even with a minor left turn movement (less than 10%), projected traffic volumes would meet warrants for a left turn lane in both directions. In fact, existing turn movements are close to meeting warrants for left turn lanes in both directions. With the recent development near the S. Syene Road intersection and the presence of existing left turn lanes, staff recommends the construction of left turn lanes in both directions on Lacy Road at the Sunflower Drive/McGaw Park Entrance. Staff also recommends a pedestrian refuge (island) on the east leg of the intersection to accommodate an improved pedestrian/bike crossing of Lacy Road. This is a fairly major crossing allowing access to McGaw Park and the shared-use path on the south side of the road from the Swan Creek neighborhood. The 30% plans show a right turn taper on the east leg of the intersection. Staff would recommend removing the right turn taper, but incorporating a pedestrian refuge island on the east leg. The size of the island can be similar to what is built there today, which should be less of an impact than the right turn taper. Staff would also recommend eliminating the 2' buffer through the intersection to create additional space for the pedestrian refuge and keeping a narrow footprint.

This turn lane recommendation is partially consistent with the layout that was requested in the January 2 EFNA memo. However, the pedestrian island is a new staff recommendation which has not yet been presented to EFNA. It is noted that, in general, median islands have not been supported by the EFNA group.

<u>McGaw Road</u> – The existing geometry does not include any turn lanes at the McGaw Road intersection.

Similar to Sunflower Drive, turning movement projections at McGaw Road were not prepared as part of the McGaw Park Neighborhood TIA. A traditional warrant analysis cannot be performed for this intersection, given the lack of count data. However, **staff would recommend against a WB left turn lane at McGaw Road** given the lack of connectivity to the south, the lack of additional development within this residential area, and the low-volume nature of McGaw Road.

This recommendation is consistent with the layout that was requested in the January 2 EFNA memo.

<u>Jones Farm Road</u> – The existing geometry includes a WB right turn lane on Lacy Road and a SB right turn taper onto Lacy Road.

Warrants are met for EB and (future) WB left turn lanes at the intersection with Jones Farm Road for projected volumes. However, existing volumes do not meet warrants. Jones Farm Road will be extended to the south to connect with Aurora Drive and the North Park Plat. When that intersection is constructed, staff would recommend adding left turn lanes as part of that improvement. Staff's recommendation is to handle this intersection similarly to Notre Dame Drive, by building the outside curb and gutter at its ultimate location for a future left turn lane, but not build the turn lane at this time.

This recommendation is not entirely consistent with the layout that was requested in the January 2 EFNA memo. However, it does address the concerns related to the impact of turn lanes on speed control. With this staged approach, the left turn lane would only be constructed at a point in time when it is warranted.

North Park Street – The existing geometry does not include any turn lanes. Staff does not have a strong recommendation on the left turn lane for this intersection. The proposed left turn lane fits within the right-of-way and will accommodate the left turn movement for access to the apartment buildings located within the N. Park Plat. The left turn lane would align with the adjacent EB left turn lane at S. Syene Road and fits without additional widening. With North Park being located so close to the S. Syene Road intersection, it's possible that EB queuing could extend back to the intersection, blocking access onto N. Park Drive for brief periods during peak hours. This may result in low utilization of the left turn lane, with drivers either continuing south on S. Syene to turn right onto Aurora or continuing to the west to turn left onto Jones Farm Drive. The January 2 memo from EFNA supports the left turn lane and the projected volumes meet warrants. At this time, staff is comfortable with the recommendation to proceed with the left turn lane at this intersection.

S. Syene Road – The existing geometry includes a SB right turn lane on S. Syene Road.

The Intersection Control Evaluation (ICE) Report for S. Syene Road compared an improved all-way stop control (AWSC) intersection (with added left turn lanes) with a signalized intersection. A roundabout was ruled out as an alternative due to the proximity to the railroad corridor. The North Park Plat dedicated additional right-of-way for the future Lacy/S. Syene intersection based

on a future signalized intersection with turn lanes. Based on the analysis, a signalized intersection is the recommended intersection control for the following reasons:

- The AWSC results in Level of Service (LOS) F (206 seconds of delay in the PM peak) for the intersection as a whole in the design year of 2037. The traffic signal maintains LOS C (22 seconds of delay in PM peak).
- A signalized intersection allows for pre-emption with the railroad to clear the railroad grade crossing prior to the gate activation for the train. This is especially important at this location due to the proximity of the railroad tracks to the intersection.
- The intersection meets traffic signal warrants 2, 3, and 9 for the five year horizon 2022 and the dense development that is occurring as part of the N. Park Plat further supports the signalization.
- A signalized intersection is inevitable at the Lacy Road/S. Syene Road intersection. Staff
  recommends proceeding with the signalized intersection at this time to take full
  advantage of the grant dollars that are available for this project.

Staff's recommendation is to proceed with the signalized intersection alternative for the S. Syene Road intersection and recommends authorizing Mead & Hunt to proceed with final design of the signalized intersection.

The traffic signal recommendation was discussed at the Dec. 17 EFNA meeting. The group was supportive of the signalized intersection alternative with the turn lanes identified in the 30% plans.

### **Summary of Proposed Intersection Improvements**

	Existing Right	Existing Left	Proposed Right	Proposed Left	Matches EFNA Jan 2 Memo	Notes
Mica Road	X			X		
Fahey Glen					X	Proposed Roundabout
Notre Dame Drive	Х			Х	Partial	Proposed future left outside footprint, but not constructed
Sunflower Drive	X	Х		Х	Partial	Pedestrian island has not been presented to EFNA
McGaw Road					X	
Jones Farm Road	Х			Х	Partial	Proposed future left outside footprint, but not constructed
North Park Street				Х	Х	
S. Syene Road	X		X	Х	X	Proposed Signal

